



# YOSHIMURA

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## ST-R CAMSHAFT SET SUZUKI RM-Z450 Part No. 700XX219210

### CLOSED COURSE COMPETITION ONLY AND IS NOT INTENDED FOR STREET USE

- ⊙ The product that you are purchasing is designed and intended for closed course competition use only and is labeled as such, i.e. Yoshimura "RACE SERIES". Yoshimura RACE SERIES products are neither designed nor intended for use on PUBLIC ROADS or LAND. Such use is prohibited by Federal and State regulations.
- ⊙ This product is only designed for the application listed above. DO NOT install on any other applications not specified.
- ⊙ Yoshimura is not liable for any damages due to abuse, misuse, improper installation and/or modifications.
- ⊙ Installation should be done by a qualified technician.



**DANGER**

Indicates a potential hazard that could result in death, injury or engine breakdown.



**CAUTION**

Indicates a potential hazard that could result in motorcycle damage.

REFERENCE

Indicates special information for simplified installation.

### ● Applicable Model

**SUZUKI : RM-Z450 2015**

DO NOT use for any other models.

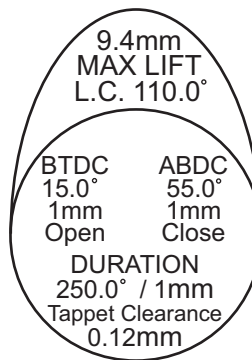
### ● Kit Contents

No.	Part No.	Description	Qty
1	21921-CSAI-00**	Yoshimura Intake Camshaft (w/shims)	1
2	21921-CSAE-00	Yoshimura Exhaust Camshaft	1
4	INST KIT	Instruction Kit	1
5	17029	Yoshimura Decal	1

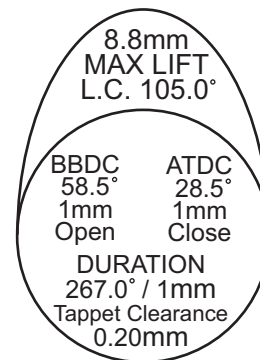
\*\* Install two 0.5 mm spring seat shims (1.0 mm total) to maintain proper tension.

### ● Specifications

#### INTAKE



#### EXHAUST



\* The profiles above are designed specifications. There may be small variances from measured numbers.



**DANGER**

The valve spring seat shims must be installed under the INTAKE valve spring seat with the correct numbers.

### ● Optional Accessories

- MX Tuner ..... [Part No. 431-185-0010]
- Head Gasket (T=0.40mm) ..... [Part No. 0000A-E8110-141]
- FI Indicator Light Assembly ..... [Part No. 36380-28H00]
- Battery Lead Wire ..... [Part No. 36890-28H00]

## Installation Steps

Component removal and installation must be done in accordance with the SUZUKI Factory Service Manual. Please refer to your SUZUKI Factory Service Manual for removal and installation procedures.

### ● Inspecting The Items

Follow the service manual and thoroughly inspect related parts and replace if necessary.



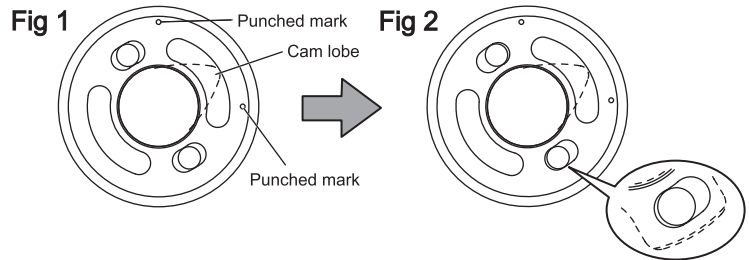
Check and replace each part thoroughly.

### ● Installing the Camshaft and Sprocket



The intake camshaft and the sprocket are assembled when delivered. However, if sprocket bolts are loosened or removed follow the steps below to assemble and adjust the valve timing as it is designed.

- Adjust the top of the cam and the punched marks on the sprocket as shown in Figure 1.
- Adjust bolt-hole on camshaft as shown in Figure 2.
- Tighten the cam sprocket bolts and torque to 25 Nm (2.5 kg-m, 19 ft-lbs).



### REFERENCE

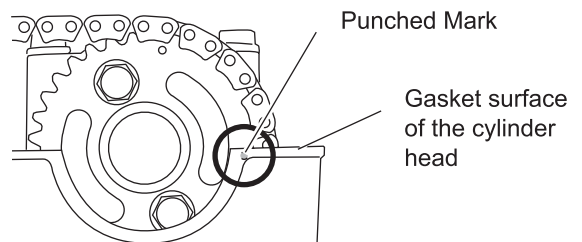
For proper clearance between piston and intake valve, the intake cam sprocket should be installed with the valve timing retard as Figure 2 shows.

### ● Installing the Camshaft and Sprocket

Check to make sure that the piston is at T.D.C.  
Follow the SUZUKI Factory Service Manual and install the exhaust camshaft and intake camshaft.

### REFERENCE

The punch mark on the intake cam sprocket is located just below the surface of the cylinder head.



### ● Auto Decompression

- The auto decompression components are used with this product. Follow the Suzuki Factory Service Manual to remove from the stock camshaft. Install the stock decompression components to the ST-R exhaust camshaft.

### ● Measure and Adjust Tappet Clearance

Specification (when the engine is cold)

INTAKE: 0.10 – 0.14mm

EXHAUST: 0.18 – 0.22mm



Check that the tappet clearance is within the specified range. Adjust if necessary.  
To prevent burns and scratches, apply oil on top of the cam.  
Fill the tappet oil pool of the cylinder head with oil.

## ● *Measuring and Adjusting the Valve Timing*



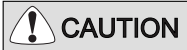
Both the intake and exhaust camshafts are delivered with the designed lobe center. It is required to measure it by adjusting the valve timing when installing.  
Note: The intake camshaft is supplied with an adjustable cam sprocket.



Thread lock (Thread Lock 1342 – Suzuki P/N: 99000-32050) must be applied to the cam sprocket bolts. Torque cam sprocket bolts to 25 Nm (2.5 kg-m, 19 ft-lb).

## ● *Valve Timing*

This product allows you to change the engine characteristics by adjusting intake valve timing.



When the valve timing is changed, the piston-valve clearance will also change. In some cases, there is insufficient piston-valve clearance after the valve timing has been changed depending on the engine specification.  
Note: The piston-valve clearance is a higher priority over the valve timing.

### ***After Installation***

- Fill engine oil to specified level. Use oil grade equivalent to or higher than API-SG.
- To reduce the friction on the engine, remove the spark plug and crank the engine.
- Follow the service manual to check the oil level. Add oil as needed.
- Start the engine and check for oil leaks. Let engine run until the oil temperature reaches operating temperature. To maintain oil pressure during engine warm up, maintain engine speed between 2,000 ~ 3,000 RPM.
- For the first 30 minutes, open less than 1/4 of the throttle. After 30 minutes to 1 hour, open less than 1/2 of the throttle.
- After the break-in period, measure and adjust the tappet clearance and check for any abnormal noise.
- To maintain oil pressure during engine operation, maintain engine speed above 5,000 RPM.



During the break-in period, do not ride aggressively (sudden start and acceleration).



After installing this product, adjust the fuel volume using the MX Tuner.  
[Part No. 431-185-0010]

Quality control is implemented to all the products. If, however, any failure was found, please notify Yoshimura R&D, USA through the selling dealer. Necessary technical service or replacement will be made. Due to on going improvement, the specifications and prices of the products are subjected to be changed without notice.

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